

Date: Wednesday, 14/05/2008 10:01:45 AM
 User: Julie Lecocq

Process Sheet

Customer	: CU-DAR001 Dart Helicopters Services	Drawing Name	: BAR
Job Number	: 39258		
Estimate Number	: 10388		
P.O. Number	:	Part Number	: D31963
This Issue	: 14/05/2008 S.O. No. :	Drawing Number	: D3196 REVC
Prsht Rev.	: NC	Project Number	: N/A
First Issue	: 14/05/2008 Type : MACHINED PARTS	Drawing Revision	: C
Previous Run	: 32136	Material	:
Written By	:	Due Date	: 30/05/2008 Qty: 10 Um: Each
Checked & Approved By	: <u>JW 08.5.14</u>		
Comment	: Est Rev: A New Issue 05-11-08 JLM		

Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
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1.0	M6061T6B0750X01500	6061-T6 Bar .75" X 1.5"
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Comment: Qty.: 3.0345 f(s)/Unit Total: 30.3450 f(s)
 Material: 6061-T6/T651 (QQ-A-200/8) or (QQ-A-225/8)
 (M6061T6B0.750x01.500)
 Identify for D3196-3
 Batch: M108118

(10)

08/05/24

2.0	BAND SAW	BAND SAW
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Comment: BAND SAW
 Cut blank: (0.75" x 1.50") x 34.750" long Bar

(10)

08/05/24

3.0	HAAS1	HAAS CNC VERTICAL MACHINING #1
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Comment: HAAS CNC VERTICAL MACHINING #1

1-Machine D3196-3 as per Folio FA339 and Dwg D3196 Identify as D3196-3

2-Deburr

JL 08/05/30

4.0	QC2	INSPECT PARTS AS THEY COME OFF MACHINE
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Comment: INSPECT PARTS AS THEY COME OFF MACHINE

JL 08/05/30

5.0	QC8	SECOND CHECK
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Comment: SECOND CHECK

JL 08/06/01

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: D 3196-3 PAR #: N/A Fault Category: Prod/Machined Part NCR: Yes No DQA: D Date: 08/06/04
 QA: N/C Closed: _____ Date: _____

NCR: 39258		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
08/05/28	3	1st part as C'SINK .660x100° is .700x100°, tool was programmed to low	GP 08.05.29 pcv QSI 042	C'SINK DIM WAS MEASURED IN OPPOSITE DIRECTION. C'SINK WAS NOT DEEP ENOUGH. PROGRAM ALTERED AND C'SINK DONE CORRECTLY. REF NCR 08051	GP 08/05/30	GP 08.05.29 pcv QSI 042	GP 08.05.29 pcv QSI 042	GP 08/05/30

NOTE: Date & initial all entries

Date: Wednesday, 14/05/2008 10:01:45 AM
User: Julie Lecocq

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: BAR

Job Number: 39258

Part Number: D31963

Job Number:



Seq. #:

Machine Or Operation:

Description :

6.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



(10X)

Comment: HAND FINISHING RESOURCE #1

Chemical Conversion Coat as per QSI 005 4.1

mf RB

08/06/02

7.0

POWDER COATING

POWDER COATING



Comment: POWDER COATING

Powder Coat Grey Sandtex (Ref: 4.3.5.6) as per QSI 005 4.3

START TIME:

8:50

OVEN TEMPERATURE:

220°

FINISH TIME:

9:20

08-06-03

(10)

8.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

08-06-03

(10)

9.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location:

sta. 7

08-06-03

(10)

10.0

QC21

FINAL INSPECTION/W/O RELEASE



08/06/04

Comment: FINAL INSPECTION/W/O RELEASE

Job Completion



mf 08-06-04

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
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NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART AEROSPACE LTD		Work Order:	39258
Description: Bar		Part Number:	D3196-3
Inspection Dwg: D3196	Rev: C	Page 1 of 1	

FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article ☐ Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
34.625	+/-0.010	34.625	✓			
33.650	+/-0.005	33.650	✓			
0.488	+/-0.005	.488	✓			
17.011	+/-0.010	17.011	✓			
0.512	+/-0.005	.512	✓			
1.500	+/-0.010	1.502	✓			
0.464	+/-0.010	.464	✓			
0.504	+/-0.010	.503	✓			
Ø0.344	+0.006/-0.001	Ø.345	✓			
Ø0.660 x 100°	+0.008/-0.001 x 0.5°	Ø.660x100°	✓			
0.962	+/-0.005	.964	✓			
0.750	+/-0.010	.751	✓			
4.750	+/-0.010	4.750	✓			
12.531	+/-0.010	12.531	✓			
16.999	+/-0.010	17.000	✓			
21.844	+/-0.010	21.844	✓			
29.625	+/-0.010	29.625	✓			
0.250	+/-0.010	.250	✓			
1.000	+/-0.010	1.000	✓			
R0.125	+/-0.010	R.125	✓			
0.987	+/-0.010	.989	✓			
0.060 x 45°	+/-0.010 x 0.5°	.06x45°	✓			

Measured by:	J.L	Audited by:	SA	Prototype Approval:	N/A
Date:	08/05/28	Date:	08/05/29	Date:	N/A

Rev	Date	Change	Revised by	Approved
A	04.04.20	New Issue	KJ/RF	
B	06.10.24	Dwg Rev. updated	KJ/JLM	
C	07.05.08	Dwg Rev. updated	KJ/JLM	

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

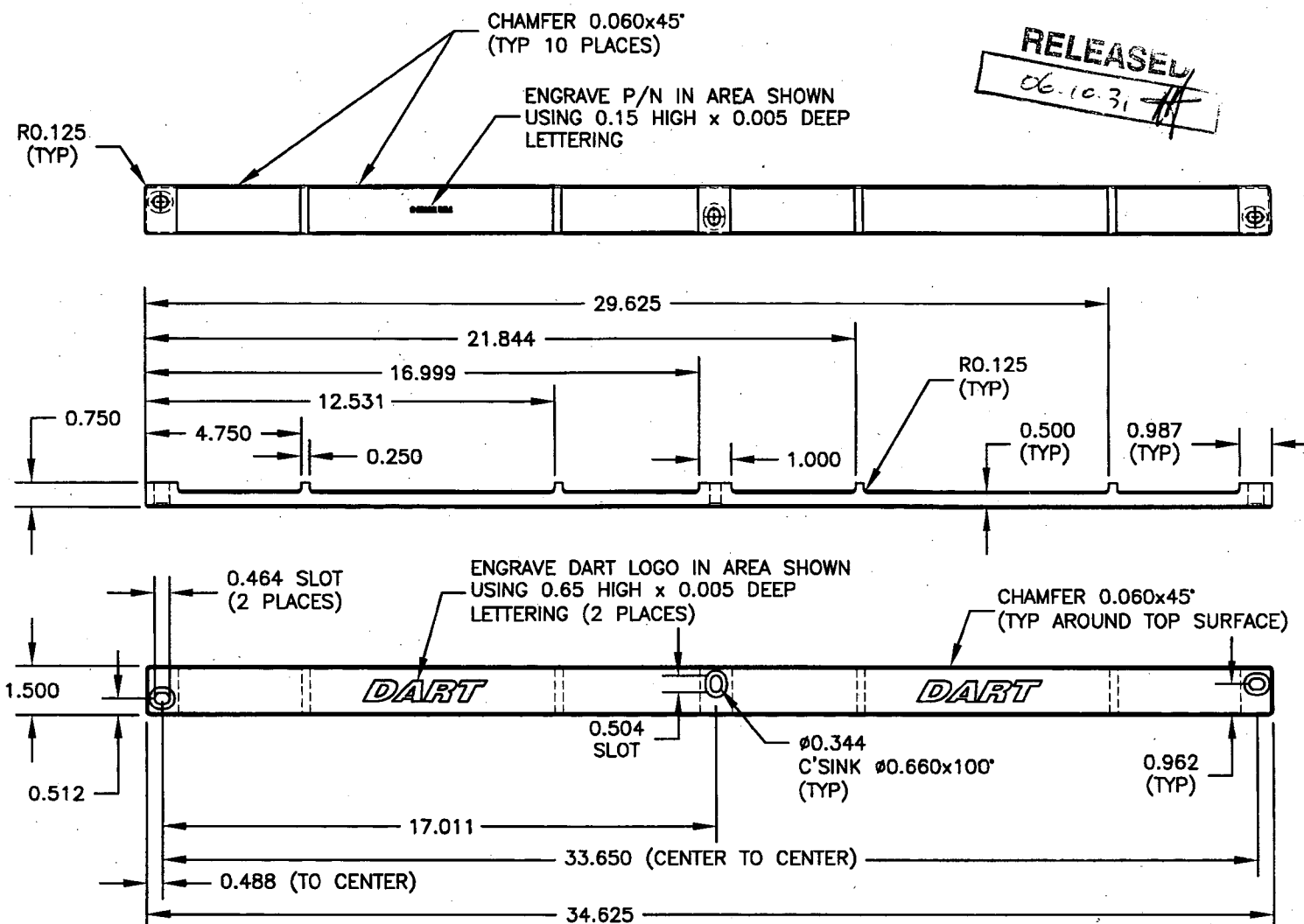
NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART

DESIGN	Q	DRAWN BY	J	DART AEROSPACE LTD
CHECKED	PH	APPROVED	J	HAWKESBURY, ONTARIO, CANADA
DATE	06.10.31	DRAWING NO.	D3196	REV. C
TITLE	BAR	SHEET	2 OF 3	SCALE
				1:5

RELEASED
06.10.31



D3196-3 BAR

- 1) MATERIAL: 6061-T6/T651 ALUMINUM (QQ-A-200/8 OR QQ-A-225/8) (REF DART SPEC. M6061T6B)
- 2) BREAK ALL SHARP EDGES 0.005 TO 0.010
- 3) FINISH: ACID ETCH AND ALODINE PER DART QSI 005 4.1
POWDER COAT GREY SANDTEX (4.3.5.6) PER DART QSI 005 4.3
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 5) ALL DIMENSIONS ARE IN INCHES

SHOP COPY
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UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 31258

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

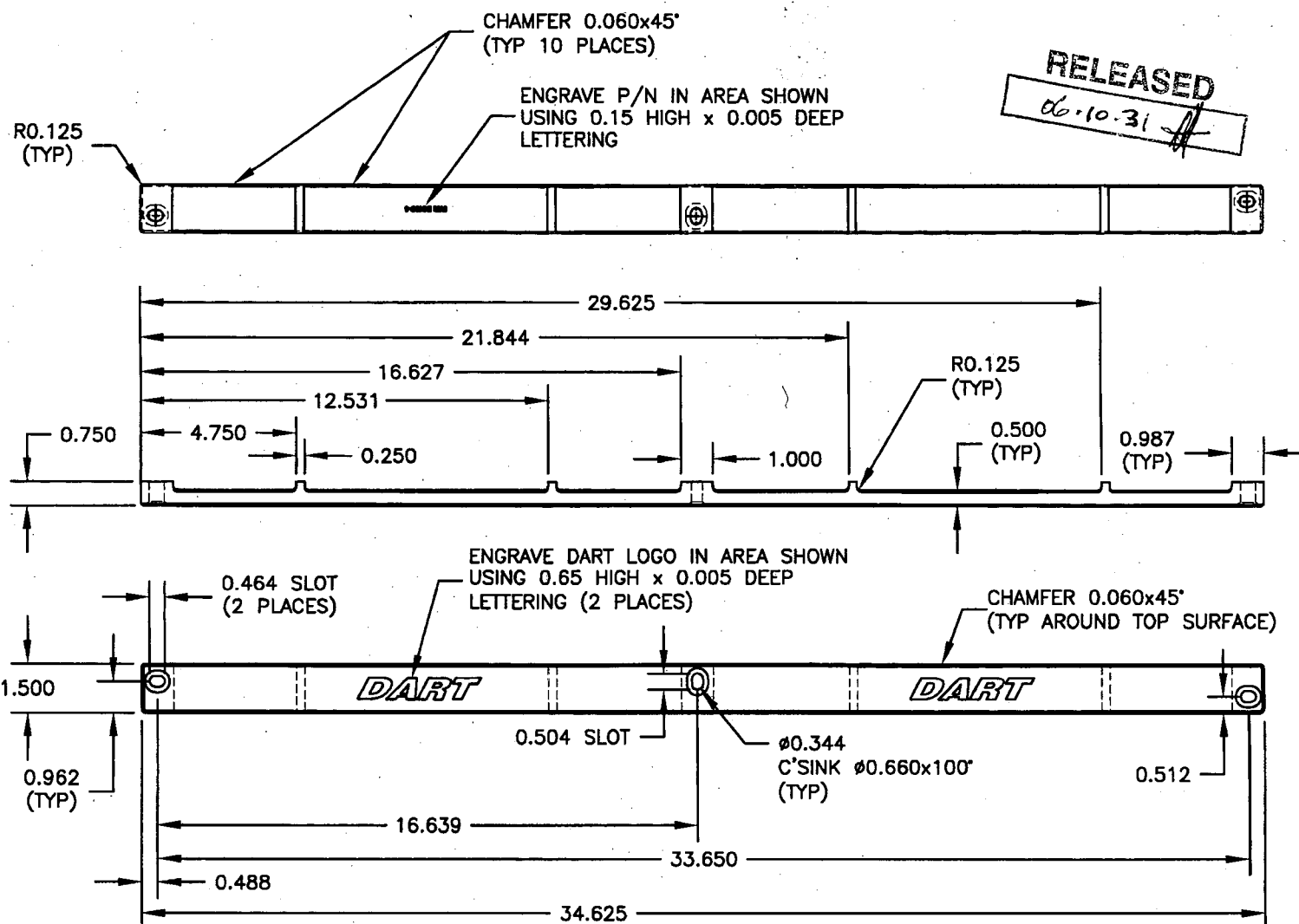
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NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART

RELEASED
06.10.31



DESIGN	DRAWN BY	DART AEROSPACE LTD
06		HAWKESBURY, ONTARIO, CANADA
CHECKED	APPROVED	DRAWING NO.
04		D3196
DATE	TITLE	SHEET 3 OF 3
06.10.31	BAR	SCALE 1:5

D3196-4 BAR

- 1) MATERIAL: 6061-T6/T651 ALUMINUM (QQ-A-200/8 OR QQ-A-225/8)
(REF DART SPEC. M6061T6B)
- 2) BREAK ALL SHARP EDGES 0.005 TO 0.010
- 3) FINISH: ACID ETCH AND ALODINE PER DART QSI 005 4.1
POWDER COAT GREY SANDTEX (4.3.5.6) PER DART QSI 005 4.3
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 5) ALL DIMENSIONS ARE IN INCHES

NO. 31258
WORK ORDER
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ENGINEERING
RETURN TO
SHOP COPY

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries